

Patent
10/039,466

LISTING OF THE CLAIMS:

Please amend Claims 22 and 23 as shown.

Please add Claims 25-28 as shown.

1-21. (Canceled)

22. (Currently Amended) A method of reducing atrial fibrillation, comprising:
inserting a catheter at least partially into the heart, the catheter having a dual balloon structure, including an outer balloon and an inner balloon contained within the outer balloon, a portion of the dual balloon structure located in the left atrium and a portion of the dual balloon structure located in a pulmonary vein; and
inflating at least the outer balloon with a perfluorocarbon such that an exterior surface of the outer balloon is in contact with at least a partial circumference of the portion of the pulmonary vein adjacent the left atrium, the perfluorocarbon having a temperature in the range of about -10°C to -50°C .

23. (Currently Amended) The method of claim 22, wherein the dual balloon structure has a working region having a length of between about 5 mm and 10 mm.

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24. (Original) The method of claim 22, further comprising:
inserting a wire capable of rupturing the atrial septum from the femoral vein into the right atrium;
forming a hole using the wire in the interatrial septum between the right atrium and the left atrium;
inserting a guide catheter into the right atrium;
inserting a guide wire through the guide catheter into the right atrium and further into a pulmonary vein;
disposing the catheter over the guidewire into a volume defined by the joint of the right atrium and the pulmonary vein.
25. (New) The method of Claim 22, further comprising inflating the inner balloon with a biocompatible liquid.
26. (New) The method of Claim 25, wherein the biocompatible liquid is static.
27. (New) The method of Claim 25, wherein the biocompatible liquid contains contrast media.
28. (New) The method of Claim 26, wherein biocompatible cooling fluid in the inner balloon chills biocompatible fluid between the dual balloons.